

REMARKS

In the amendments above, Claims 1 to 11, 14 and 15 have been cancelled, Claim 12 and has been amended, and Claims 16 to 21 have been newly added, to more particularly point out and distinctly claim Applicant's invention.

The disclosure has been objected to. The Examiner's attention is directed to the amendments above, where in the specification has been amended to overcome the basis of the Examiner's objection.

Claim 12 has been objected to. The amendments to Claim 12 above are believed to overcome this objection.

Claim 14 has been rejected under 35 U.S.C. 112, second paragraph, as being indefinite. The cancellation of Claim 14 above is believed to render this objection moot.

Claims 1-15 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Lecomte, U.S. Patent No. 6,065,272 ("Lecomte") in view of JP Patent No. 3-9302. ("JP-302"). The Examiner maintains that Lecomte discloses the claimed packaging device comprising two film feed means arranged in parallel and a predetermined interval apart from each other, and comprising two film pull-out rollers, with pull out rolls 4, which rotate to pull out films from said respective fill feed means and are arranged in parallel with circumferential surfaces being in contact with each other via the pulled films in a normal state; and a driving part rotating said film pull-out rollers, via drive rollers 4, means have driving parts, wherein an object for disposal is received between said film feed means via the arrow showing the direction of inserting the disposal material, said driving part rotates said film pull-out rollers, thereby allowing the object for disposal to be sealingly packed between the films, via sealing members 5, and

wherein at least one of said film pull-out rollers includes a circumferential surface that is elastically deformed by the object for disposal when the object for disposal passes between said film pull-out rollers, via spring 11, whereby the object for disposal is allowed to be sealingly paced while the films are into close contact with a surface of the object for disposal; that JP-302 discloses a similar packaging device with the use of film feed rollers; and that it would have been obvious to one having ordinary skill in the art at the time the invention was made to have substituted Lecomte's film feeding means as the film in the zigzag fold by using film feed rollers, as suggested by JP-302, to make it easier and faster to feed the film and avoid the unfolding step of the zigzag web.

Applicant respectfully traverses the above rejection.

According to the invention of the present application trash is sealingly packed as an object for disposal by using two films pulled out from two film feed rollers, thereby reducing the bulk of the trash when it is stored. To achieve this object, at least one of the films pulled out by the two film pull-out rollers has an adhesive surface on its entire surface facing the other film.

In one aspect of the invention of the present application, at an instant when an object for disposal is deposited from the inlet, portions of the films positioned along a passage-direction leading edge portion of the object for disposal are first in close contact with each other. Next, while the object for disposal is passing between the film pull-out rollers, portions of the films positioned along side edge portions of the object for disposal are directly bonded together, so that the films come into close contact with outer surfaces of the object for disposal. Then, after the object for disposal passes between the film pull-out rollers, portions of the films positioned along a passage-direction rear edge portion of the object for disposal are directly bonded together.

Consequently, the whole periphery of the object for disposal is sealingly packed, and the films are in close contact also with the surfaces of the object for disposal, so that the object for disposal is sealingly packed in a deaerated state.

To thus sealingly pack the object for disposal, the following structures are required: (a) a film having an adhesive surface on the entire surface is used as at least one of the films, and (b) at least one of the film pull-out rollers is elastically deformed along the shape of the object for disposal when the object for disposal passes therebetween.

As a result, the odor of the object for disposal is confined, which is one of the objectives of the invention of the present application that is achieved.

It is also an objective of the invention of the present application to store a larger number of objects for disposal in the trash storage part after sealingly packing the objects for disposal. To obtain this objective, it is necessary to sealingly pack the objects for disposal in the substantially deaerated state by the aforesaid two structures (a) and (b). Also, it is important to not separate the sealingly packed objects for disposal from one another. If the sealingly packed objects for disposal are stored in a connected state without being separated from one another, the objects for disposal sealingly packed by the film pull-out rollers are pushed down into the trash storage part, resulting in an increase in storable volume.

Further, according to the present invention, when a width of the trash storage part along the film pull-out rollers is substantially equal to a width of the films, as described in Claim 13, as amended, the objects for disposal sealingly packed by the films are folded when stored in the trash storage part. Thus, it is a feature of the invention that the storable volume can be further increased.

The present invention is not suggested by Lecomte, JP-302, or any combination thereof. In Lecomte, welding of the entire periphery of the films sandwiching a waste is not performed. In the invention of Lecomte, instead of two films, a heat-sealable plastic sleeve (3) which is a sleeve-form (cylindrical) film is pulled out, and only portions of the heat-sealable plastic sleeve (3) positioned on an upper side and a lower side of the waste are welded by a heat-sealing mechanism (5) disposed below rollers (4). A predetermined interval exists between the rollers (4) and the heat-sealing mechanism (5), and, accordingly, even though the rollers (4) are made of an elastically deformable material, Lecomte does not have the structure of the invention of the present application, that marginal surfaces of the heat-sealable plastic sleeves (3) positioned along side edge portions of the waste are bonded to each other while the waste is passing between the rollers (4,4).

Further, after the waste passes between the rollers (4,4), air easily enters the inside of the heat-sealable plastic sleeve (3) from the gap between the rollers (4,4) in the course before the waste reaches the heat-sealing mechanism (5). As a result, the waste is packed by the heat-sealable plastic sleeve (3) which has the air inside, and therefore, the waste is far bulkier than in the invention of the present application.

Further, in Lecomte, the packed wastes are cut apart from one another at thermally welded portions, and the wastes are separately stored in the storage part. On the other hand, in the invention of the present application, the objects for disposal are continuously pushed into the trash storage part without being cut apart from one another after they are sealingly packed.

The structure in which the objects for disposal are not separated is described also in JP-302, but the structure of JP-302 is simply to drop a trash into the trash storage part by the weight of the trash. On the other hand, the invention of the present application has

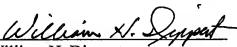
the film pull-put rollers, in addition to the structure where the objects for disposal are not separated from one another, and therefore, has a special design to push trashes into the trash storage part by utilizing a pushing force of the film pull-out rollers enabling an increase in the number of storable trashes.

Further, Claim 13 of the invention of the present application defines the relation between the width of the films and the size of the trash storage part. By this structure, since the objects for disposal sealingly packed by the films are folded when stored in the trash storage part, a storable volume can be further increased, as described above. On the other hand, this respect is not at all disclosed in any of the cited references.

Reconsideration and allowance of the claims herein are respectfully requested.

Respectfully submitted,

November 21, 2007


William H. Dippert
Registration No. 26,723

Wolf, Block, Schorr & Solis-Cohen LLP
250 Park Avenue
New York, New York 10022
Telephone: 212-883-4993
Facsimile: 212-672-1193
e-Mail: wdippert@wolfblock.com